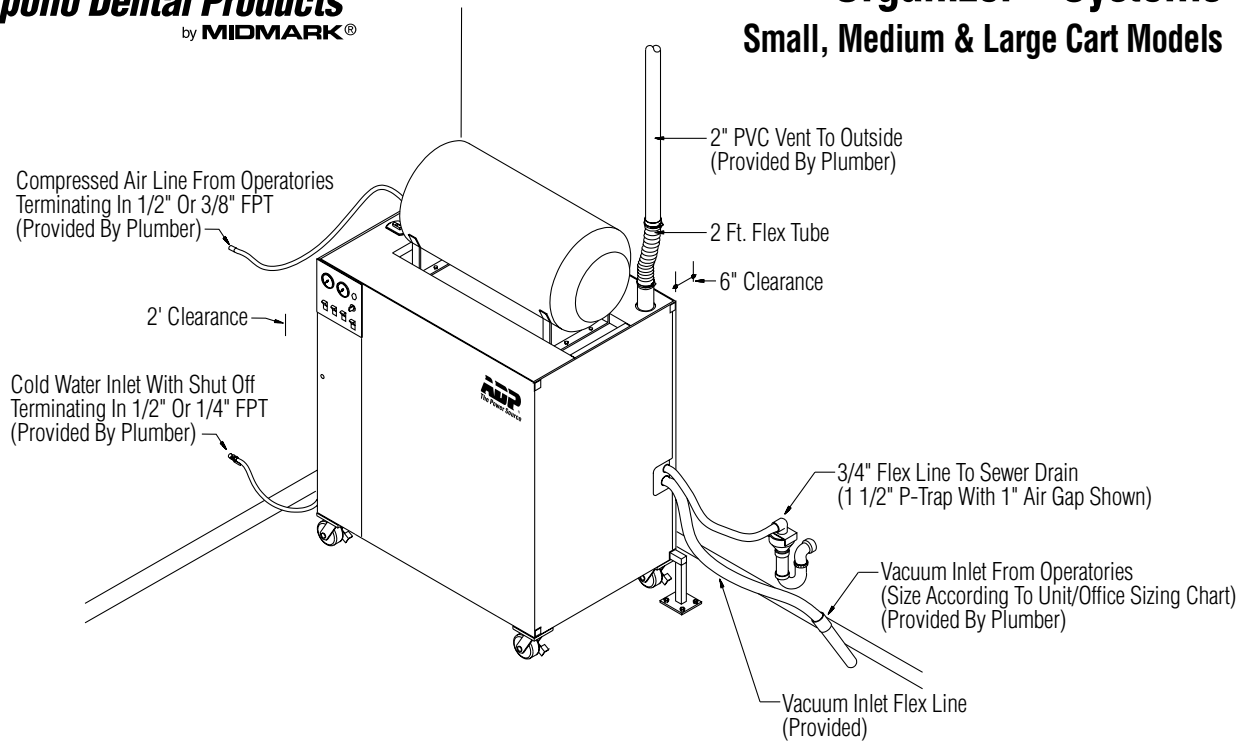
Installation & Operation

Organizer™ Systems

Small, Medium & Large Cart Models


2" PVC Vent To Outside
(Provided By Plumber)
Compressed Air Line From Operatories
Terminating In 1/2" Or 3/8" FPT
(Provided By Plumber)
2 Ft. Flex Tube
6" Clearance
2' Clearance
Cold Water Inlet With Shut Off
Terminating In 1/2" Or 1/4" FPT
(Provided By Plumber)
3/4" Flex Line To Sewer Drain
(1 1/2" P-Trap With 1" Air Gap Shown)
Vacuum Inlet From Operatories
(Size According To Unit/Office Sizing Chart)
(Provided By Plumber)
Vacuum Inlet Flex Line
(Provided)

Description:

Apollo Dental Products' Organizer™ Vacuum and Air Systems have been tested and approved by various regulatory test agencies. The following list contains ADP file numbers that may be helpful if questions arise regarding installation inspections;

Underwriter's Laboratories ..... File Number: MH13627
U.S. Food and Drug Administration ..... File Number: 2937927
City of Los Angeles Mechanical Test Labs..... File Number: M880066

The Organizer™ System should only be installed by qualified technical personnel. Should any questions arise during installation, call our Technical Support Department between the hours of 6:00 am and 4:00 pm (PST) at 800/233 4151.

Unpacking the System:

1. Place boxed unit on level surface with enough space to lower the ramps and roll the unit onto the floor. This will require 36 inches plus the width of the pallet to clear the unit when it reaches the floor.
2. Remove cardboard shipping carton from pallet.
3. Unbolt shipping feet from platform.
4. Unpin shipping feet from front of unit; pull feet from mount in back of unit. DO NOT DISCARD MOUNTING FEET.
5. Fold down unloading ramps and verify the edges are on the pallet and ready to unload unit.
6. Unlock caster wheels to allow unit to roll.
7. With one person in front of the unit, and one behind it, gently roll the unit down the ramps and off the pallet to the floor.
8. Roll the unit to the equipment room or installation location.
9. Once unit is rolled into final installation location, lock caster wheels and re-install mounting feet by sliding feet into rear mounts and bolting unit securely to the floor or wall.

Note: When installing the Organizer™ System, it is important to place the unit in an air conditioned room with adequate ventilation. Failure to do so could cause premature loss of system performance and void warranty. A 2 foot clearance is required on the left side and at least 6 inches on the back and right side.

Organizer™ Specifications & Dimensions:

Small Cart	02SLB	02SLG	02SLU	02SOB	02SOG	02SOU
Max. Users	2	2	2	2	2	2
Width	24.25"	24.25"	24.25"	24.25"	24.25"	24.25"
Depth	29"	29"	29"	29"	29"	29"
Height	56"	56"	56"	56"	56"	56"
Weight	353 lbs	353 lbs	353 lbs	303 lbs	303 lbs	303 lbs
Vac HP	1	1	1	1	1	1
Comp HP	1	1	1	1	1	1
Volt	208 1Ph	208 1Ph	208 1Ph	208 1Ph	208 1Ph	208 1Ph
Vac. Amp	8.1	8.1	8.1	8.1	8.1	8.1
Comp. Amp	7.2	7.2	7.2	5.2	5.2	5.2
Hz	60	60	60	60	60	60
Wire Ga.	10	10	10	10	10	10
Vac. Breaker	20	20	20	20	20	20
Comp. Breaker	20	20	20	20	20	20
Vac. Inlet Size	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"

Medium Cart	04MLB	04MLG	04MLU	04MOB	04MOG	04MOU
Max. Users	4	4	4	4	4	4
Width	37.25"	37.25"	37.25"	37.25"	37.25"	37.25"
Depth	29"	29"	29"	29"	29"	29"
Height	59"	59"	59"	59"	59"	59"
Weight	535 lbs	535 lbs	535 lbs	455 lbs	455 lbs	455 lbs
Vac HP	2	2	2	2	2	2
Comp HP	2	2	2	2	2	2
Volt	208 1Ph	208 1Ph	208 1Ph	208 1Ph	208 1Ph	208 1Ph
Vac. Amp	16.2	16.2	16.2	16.2	16.2	16.2
Comp. Amp	14.4	14.4	14.4	10.4	10.4	10.4
Hz	60	60	60	60	60	60
Wire Ga.	10	10	10	10	10	10
Vac. Breaker	30	30	30	30	30	30
Comp. Breaker	30	30	30	30	30	30
Vac. Inlet Size	1"	1"	1"	1"	1"	1"

Large Cart	06LLB	06LLG	06LLU	06LOB	06LOG	06LOU
Max. Users	6	6	6	6	6	6
Width	50"	50"	50"	50"	50"	50"
Depth	29"	29"	29"	29"	29"	29"
Height	61"	61"	61"	61"	61"	61"
Weight	889 lbs	889 lbs	889 lbs	770 lbs	770 lbs	770 lbs
Vac HP	3	3	3	3	3	3
Comp HP	3	3	3	3	3	3
Volt	208 1Ph	208 1Ph	208 1Ph	208 1Ph	208 1Ph	208 1Ph
Vac. Amp	24.3	24.3	24.3	24.3	24.3	24.3
Comp. Amp	21.6	21.6	21.6	15.6	15.6	15.6
Hz	60	60	60	60	60	60
Wire Ga.	10	10	10	10	10	10
Vac. Breaker	40	40	40	40	40	40
Comp. Breaker	40	40	40	40	40	40
Vac. Inlet Size	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"

A. Electrical Hook-up Requirements:

Line Voltage (208-220V 60Hz)

Depending on the cart size of the Organizer™ unit being installed, disconnects with correctly rated breaker sizes and ground connections will be required; one for the vacuum equipment and one for the compressor equipment within the cart. Refer to preceding table for proper breaker size for the unit you are installing.

Low Voltage Control (24V)

18-3 thermostat wire must be installed from each remote control switch to the back of the Organizer™ Gauge/Control Panel. The thermostat wire is connected into the existing switch wiring using the wire nuts existing on the switches. Lighted switches require red and white wires for bulb, the red and blue connection control low voltage switching of vacuum and compressor units.

NOTES: Dedicated electrical circuits with circuit breakers and approved grounds must be provided for the vacuum system, and the compressor system. Ambient temperature must be within the range of 40 degrees Fahrenheit minimum (4 degrees C) to 100 degrees Fahrenheit (38 degrees C) maximum. All systems to be installed according to local plumbing and electrical codes. Never operate the equipment without complete and proper grounding.

B. Plumbing Hook-up Requirements:

Vacuum Units:

Water Supply Line (Recommended)

1/4 inch (13mm) cold water supply line with shut off valve terminating in 1/2 inch FPT. The line must be flushed out prior to connection to the vacuum unit(s).

IMPORTANT: Water is essential for the operation and longevity of the vacuum pump. The supply must not be restricted or interrupted during operation. Water with high mineral content may cause mineral build-up and create water starvation, leading to seal failure. A water softener and filter are recommended for this situation.

Waste Line

Water and air exhaust to sewer line terminating in:

Option A- Floor sink.

Option B- A "P"-trap adapted to 3/4 inch (19mm) PVC slip connection. Local building codes may require a 1 inch (25mm) air gap. The "P"-trap must not be located more than 6" above the floor.

Vacuum Line

Refer to the preceding table to determine correct vacuum line termination size for the unit being installed.

Vacuum Vent Line

2 inch PVC pipe vent to outside.

IMPORTANT: Continuously running sinks or cuspidors must NEVER be connected to the vacuum piping system.

Compressor Units:

Operatory Air Line Termination

3/8 inch or 1/2 inch FPT termination to office supply line. Connect flex line from shut off valve on top of Organizer™ cart to office supply line.

Fresh Air Intake

1 1/2 inch vent to outside terminating in 1 inch slip connection (Small and Medium Carts).
1 1/2 inch vent to outside terminating in 1 1/2 inch slip connection (Large Cart).

Remove Oil Filler Plugs

Remove plug(s) from oil filler necks on lubricated compressor heads and check oil levels before operation.

C. Installing the System:

1. Once the Organizer™ unit is in correct installation location, lock caster wheels (2 foot clearance is required on the left side, and a 6 inch clearance in the back and right side).
2. Install floor or wall mounting feet horizontally on the floor or vertically into a secure wall to prevent unit from shifting.
3. Place condensate drain canister next to unit on the floor. Connect one end of 3/8 inch polyflow tubing into tee fitting below desiccant chamber, and the other end into fitting on lid of canister.
4. Connect provided water supply line for vacuums into water supply line using provided 1/4 or 1/2 inch fitting.

Note: It is recommended that the water supply line be flushed with at least 5 gallons of water prior to connection to the vacuum system. (Sediment in water lines of new buildings is common.)

5. Connect operatory vacuum line to the vacuum intake line located on either side of cart using provided suction hose. Cement the suction hose using PVC glue.
6. Attach provided 3/4 inch vacuum drain hose to drain line on either side of cart and into a "P"-trap or floor sink. Cement with PVC glue.
7. Connect vacuum exhaust line to 2 inch PVC vent pipe.
8. Install flexible compressed air line from valve on top of cart to operatory supply line.
9. Verify that all switches are in the off position, and connect high voltage electrical supply lines to approved disconnects with proper breakers and grounds. See previous table for unit requirements.

D. Initial Start-Up:

Vacuum System

1. Open water supply valve at source and on manifold inside cart door. Check for water leaks.
2. Start the vacuum pump(s) by pressing all of the vacuum switches to the on position.
3. Check the drain line to verify that water is flowing through the system.

IMPORTANT: Do not run pump without full pressure water supply, or serious pump seal damage could result.

4. Check the vacuum gauge to ensure that all pumps are functioning properly. Vacuum pressure is preset at the factory to 10 inches Hg.

Compressor System

1. Make sure shut off valve on top of cart is closed.
2. Turn on compressor system. One switch controls all compressor heads in a multiple system.
3. The system will run until the storage tank pressure reaches 100 psi, then shut off automatically using a preset pressure switch.
4. Monitor tank pressure for two minutes to verify that there are no air leaks in the system. To check more closely apply soapy water to plumbing joints to check possible leak paths. Care must be taken not to drip water on nearby electrical components and avoid electrical shock.
5. Slowly open the supply valve on top of the cart to supply the office with compressed air. After intervals of 2 and 10 minutes check the storage tank pressure gauge to confirm that no air leaks exist. If the pressure has dropped in this time, or the unit has cycled, a leak exists. Locate all leaks and repair as necessary.

IMPORTANT: Seal All Air leaks! Air Leaks Are the Main Cause of Compressor Failure!

6. Be sure to complete and fax or mail in the warranty card for this unit within 10 days of installation to effect warranty.
7. Store this installation manual for future reference.

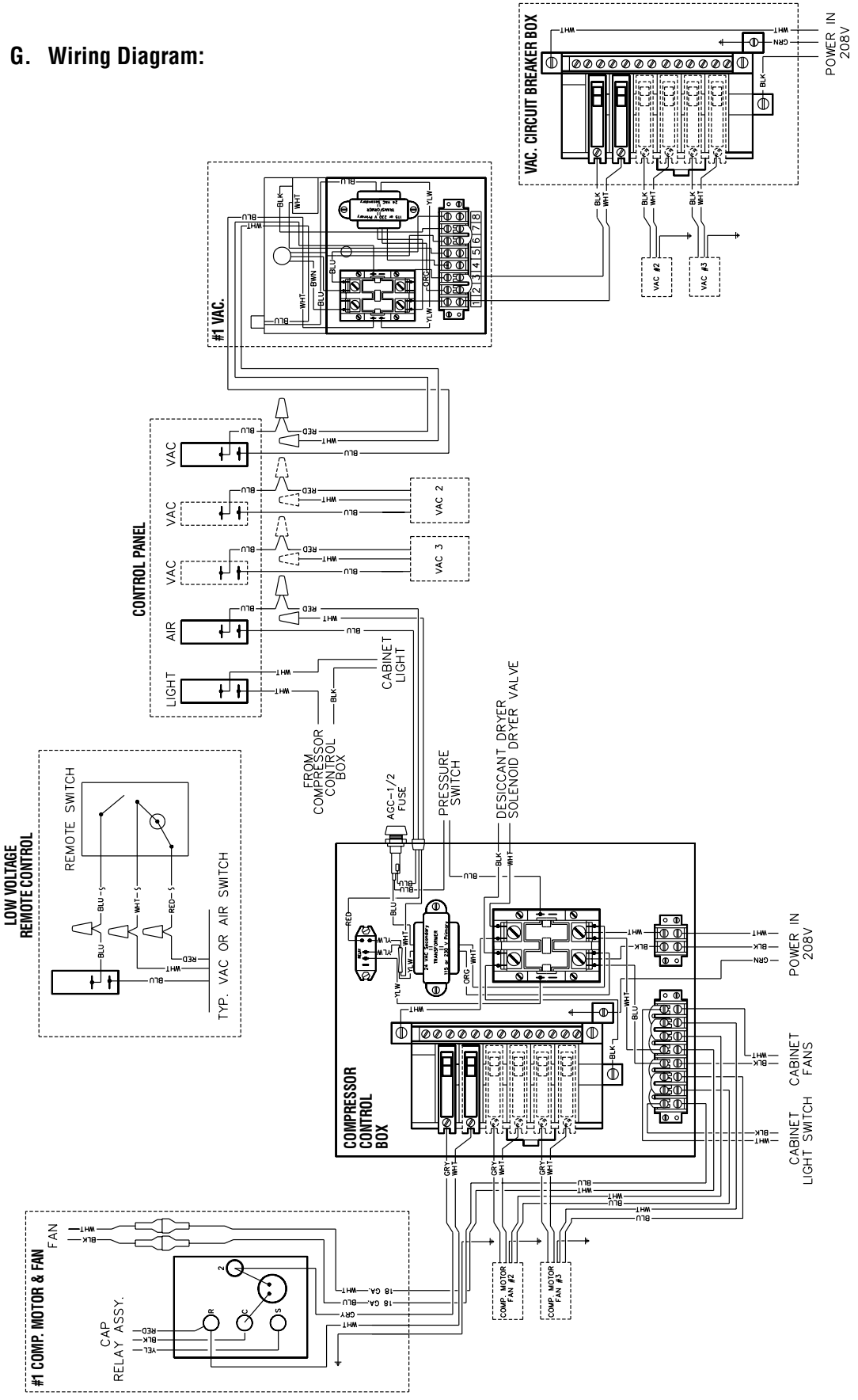
E. Vacuum Level Adjustment:

1. Open front access panel on cart.
2. The vacuum valve and filter are located horizontally behind the vacuum inlet strainer.
3. Remove the filter and valve from the PVC elbow.
4. Using a 1/4 inch nutdriver and a phillips screwdriver adjust the center mounted screw within the valve. Each full clockwise turn increases the vacuum level by approximately 2 inches Hg. The vacuum level range is between 6 and 13 inches Hg (27 to 44 KPa).
5. Reinstall filter and valve to test vacuum level and repeat steps as necessary until desired vacuum level is reached.

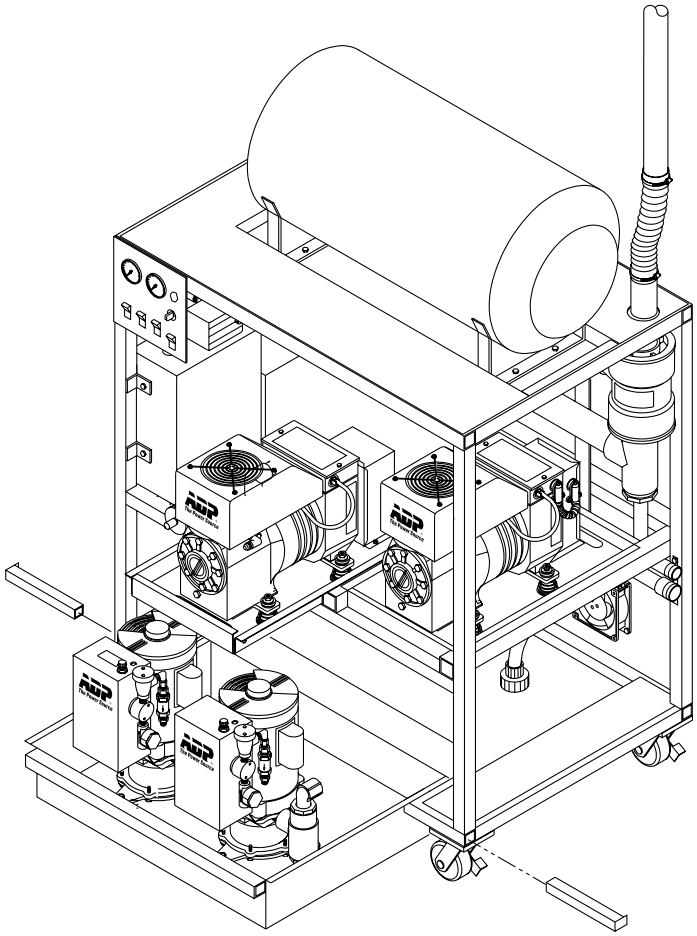
F. Maintenance:

	Daily	Weekly	Monthly	Semi-Annually	Annually
Check/Verify Proper Operation of Cooling Fans		•••			
Check Drains In Vacuum Tray-Free of Debris			•••		
Vacuum System					
Cleanse Vacuum Piping System	•••				
Cleanse Vacuum Pump Intake Strainer		•••			
Clean In-Operatory Strainers		•••			
Check Vacuum Level			•••		
Clean and Dust Off Vacuum Pump				•••	
Replace Recycler Return Line					•••
Clean or Replace Relief/Regulator Filter					•••
Clean Water Inlet Strainer					•••
Compressor System					
Check Oil Level (Lub. Comp Models Only)		•••			
Empty Condensate Drain Canister		•••			
Check Drying System Moisture Indicator		•••			
(If Pink or White = Run Manual Purge)					
Check Pump-up Times (Between 25-40 secs)			•••		
Clean and Dust Off Air Compressor				•••	
Change Compressor Oil (Lub. Comp. Models)					•••
Replace Air Intake Filters/Mufflers					•••
Replace Ultrair Filter Element					•••

G. Wiring Diagram:



H. Vacuum and Compressor Service / Maintenance:



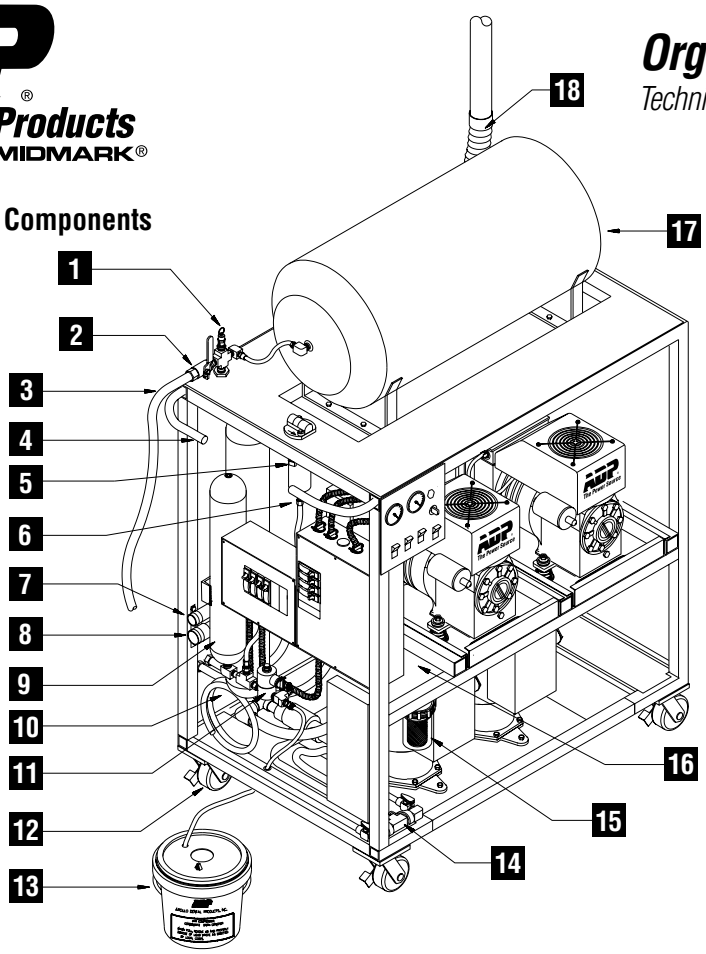
Vacuum Pump Access
To service vacuum pump(s), the lower tray of the Organizer™ cart pulls out.

1. The light switch on the control panel operates a fluorescent light in the lower left portion of the cart.
2. First unpin the locking tubes in the lower front corners of the cart.
3. Remove front cover of cart by turning fasteners counterclockwise until they click.
4. Verify that the breakers located within the cart are in the off positions by removing the left side panel. Turn off as required to avoid electrical shock hazard while working inside cart.
5. Remove the locking tubes in the lower front corners by pulling them out to the sides. The tray may have to be slightly lifted to relieve the weight from the tubes.
6. Disconnect the internal union connection on the vacuum intake line located to the left of the cart after the strainer.
7. Lift and pull out the lower vacuum tray to service vacuum pumps. The tray should not be pulled out more than 2/3 of the way out, as the exhaust and water feed lines can be stretched and/or pinched.
8. To remove a vacuum pump remove three wing nuts on pump base.
9. Unplug the high voltage lines within the individual vacuum electrical box.
10. Undo the low voltage switching wires on top of the vacuum electrical box.
11. Disconnect the intake and exhaust line unions on the pumps.
12. Remove the pumps as necessary.
13. Installatiion is the reverse of the previous steps.

Compressor Head Access
To service individual compressor heads, the Organizer™ is equipped with sliding compressor trays and an internal fluorescent light inside the cart.

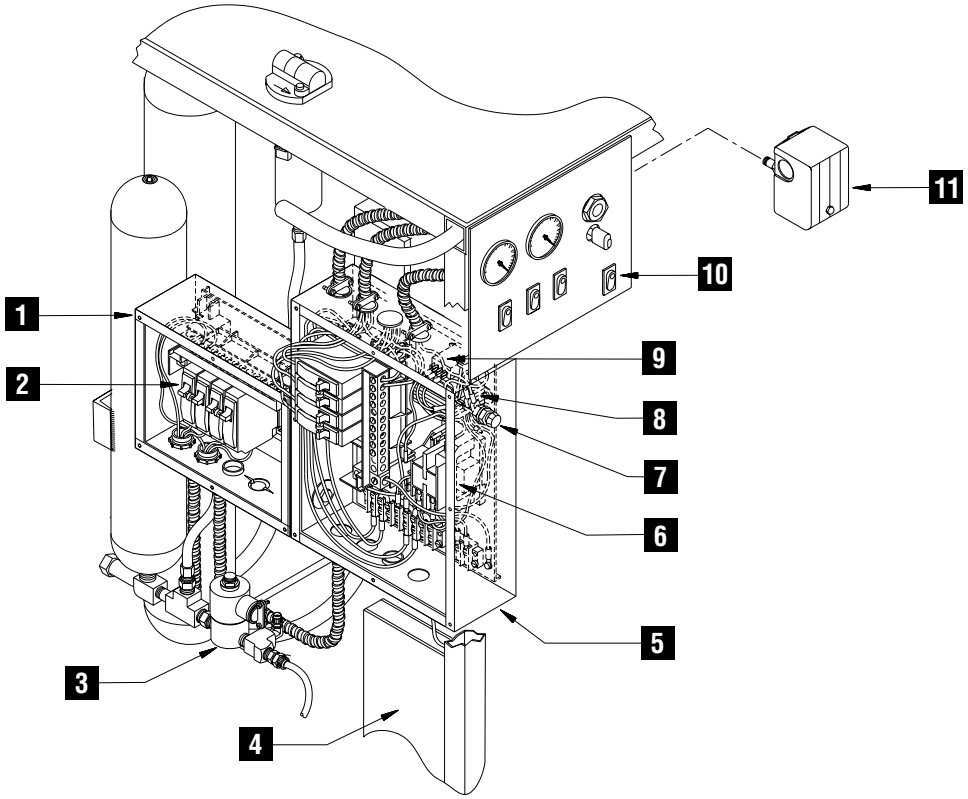
1. First verify that the breakers located within the cart are in the off positions by removing the left side panel. Turn off as required to avoid electrical shock hazard while working inside cart.
2. Remove front cover of cart by turning fasteners counterclockwise until they click.
3. Remove pins located in the front corners of the compressor trays.
4. The compressors will slide out approximately 2/3 of the way out to service compressors.
5. Disconnect air pressure line at compressor head.
6. To remove a compressor for replacement, first unplug high voltage lines to the rear of the compressor unit and disconnect conduit.
7. Disconnect air intake line at filter/muffler.
8. Make sure that most of the compressor's weight rests on the slides to the rear of the tray so it cannot tip out of the cart. With a 1/4 inch nut driver remove the lower bracket under compressor tray.
9. Pull out compressor tray carefully and using both handles at opposite ends of the tray, lift the unit out of the cart.
10. Installation is the reverse of the previous steps.

A. Organizer™ Cart Components



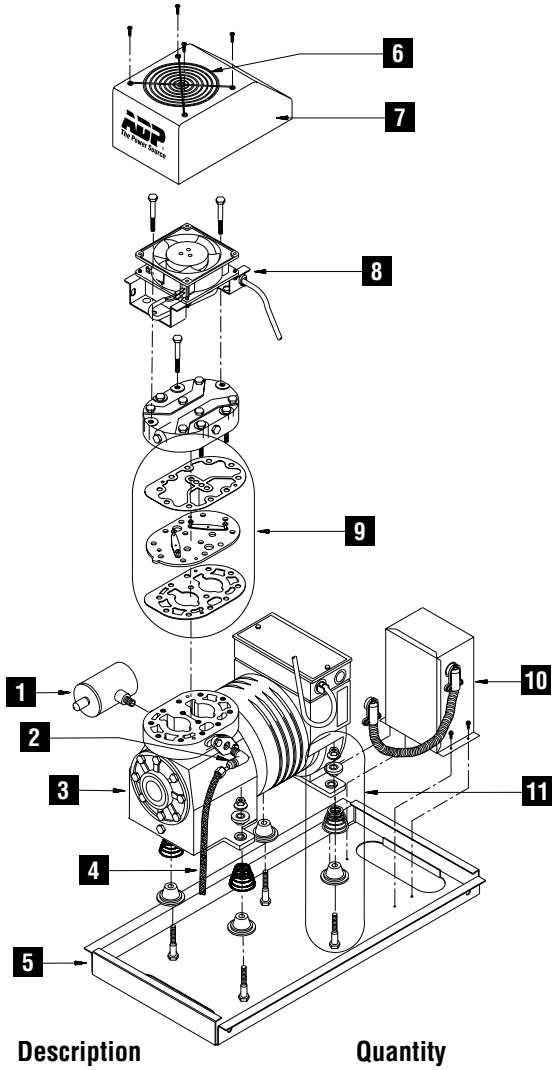
Item	Description	Quantity	Small Cart	Quantity	Medium Cart	Quantity	Large Cart
1	Pressure Relief Valve	1	PVV50560	1	PVV50560	1	PVV50560
2	Ball Valve	1	PVV50500	1	PVV50500	1	PVV50500
3	Hose	1	SPA95102	1	SPA95102	1	SPA95102
4	Handle	4	STK96040	4	STK96040	4	STK96040
5	Ultrair Filter Assembly	1	ACA85215	1	ACA85215	1	ACA85215
5a	Element Only .01 Micron	1	PFM85210	1	PFM85210	1	PFM85210
5b	Float Assembly, Ultrair	1	ACA85210	1	ACA85210	1	ACA85210
5c	Sight Glass, Ultrair	1	AAP85210	1	AAP85210	1	AAP85210
6	Separator, Vacuum	1	AVA95763	1	AVA96764	1	AVA96765
7	Drain Manifold	1	SVA97020	1	SVA97020	1	SVA97020
8	Intake Manifold	1	SVA97011	1	SVA97021	1	SVA97031
9	Desiccant Dryer Assembly	1	STK95340	1	STK95340	1	STK95341
10	Fan, Organizer Main	2	EMS10310	3	EMS10310	3	EMS10310
11	Valve, Quick Exhaust	1	PVV70502	1	PVV70502	1	PVV70502
11a	Kit, Solenoid Repair	1	ACA85332	1	ACA85332	1	ACA85332
11b	Coil, Solenoid Valve	1	ECO10118	1	ECO10118	1	ECO10118
12	Caster, Wheel	4	MMS73040	4	MMS73040	4	MMS73040
13	Condensate Drain Canister	1	SPA95400	1	SPA95400	1	SPA95400
14	Manifold, Water Supply	1	SVA95771	1	SVA95772	1	SVA95773
15	Vacuum Intake Strainer	1	PVC50706	1	PVC50706	1	PVC50708
15a	Dispos-A-Bowl	1	AVA60000	1	AVA60010	1	AVA60020
16	Valve, Vacuum Relief	1	PVV85981	1	PVV85981	1	PVV85981
16a	Filter, Vacuum Relief Valve	1	SVA95819	1	SVA95819	1	SVA95819
17	Storage Tank	1	TST91010	1	TST91020	1	TST91030
18	Flex Tube Exhaust Extension		SVA95939	1	SVA95939		SVA95939

B. Organizer™ Electrical Components



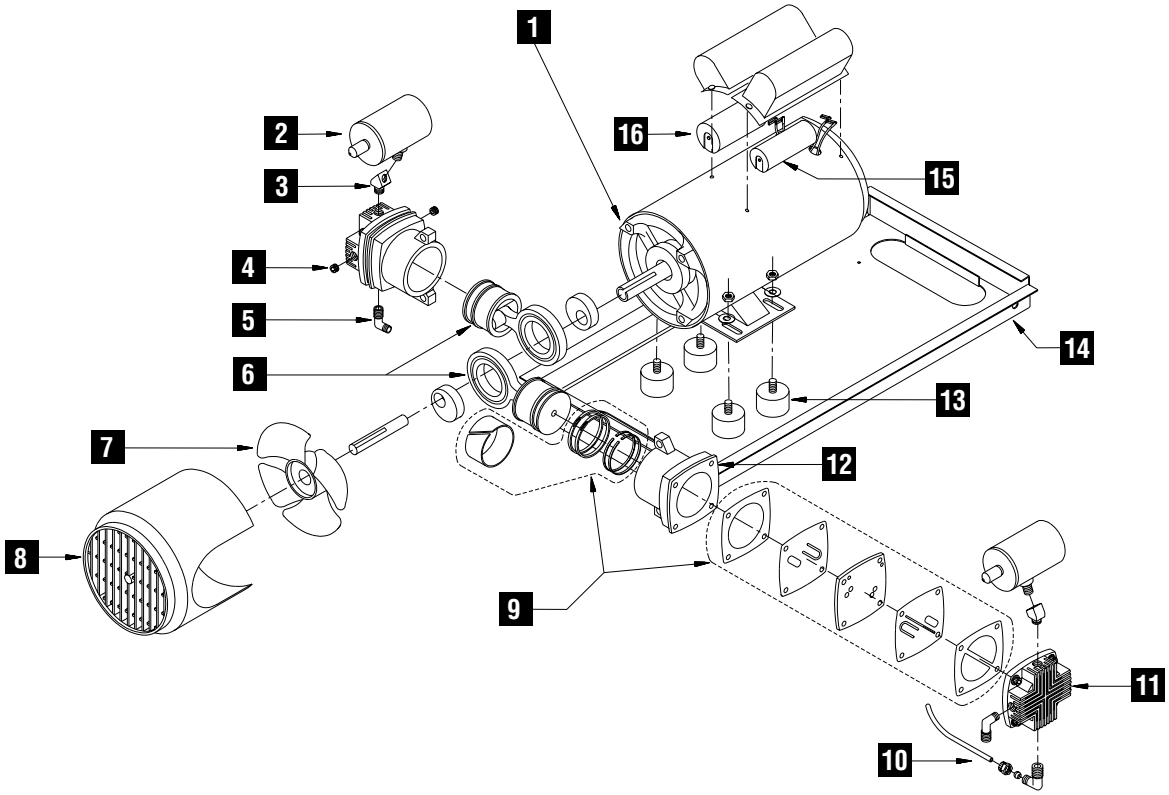
Item	Description	Quantity	Small Cart	Quantity	Medium Cart	Quantity	Large Cart
1	Platform, Vacuum Electrical	1	SEA98500	1	SEA98520	1	SEA98521
2	Circuit Breaker, 10A	4	ECS10510	8	ECS10510	12	ECS10510
2a	Bridge, Circuit Breaker	2	EMS10505	4	EMS10505	6	EMS10505
3	Valve, Quick Exhaust	1	PVV70502	1	PVV70502	1	PVV70502
3a	Coil Only, Valve Q.EV.	1	ECO10118	1	ECO10118	1	ECO10118
3b	Kit, Solenoid Repair	1	ACA85332	1	ACA85332	1	ACA85332
4	Assembly, Fluorescent Light	1	EMS10942	1	EMS10942	1	EMS10942
5	Platform, Compressor Electrical	1	SEA98110	1	SEA98110	1	SEA98110
6	Relay, Low Voltage Control	1	ETR10460	1	ETR10460	1	ETR10460
7	Fuse Holder	1	EMS10935	1	EMS10935	1	EMS10935
7a	Fuse, 1/2 Amp	1	EMS10930	1	EMS10930	1	EMS10930
8	Transformer, 24V	1	SEA95050	1	SEA95050	1	SEA95050
9	Relay, SPDT 24V	1	ETR10455	1	ETR10455	1	ETR10455
10	Switch, Panel Orange Indicator	3	ECS10440	4	ECS10440	5	ECS10440
11	Switch, Pressure	1	ECS10445	1	ECS10445	1	ECS10445

C. Organizer™ Compressor Components - Lubricated Models



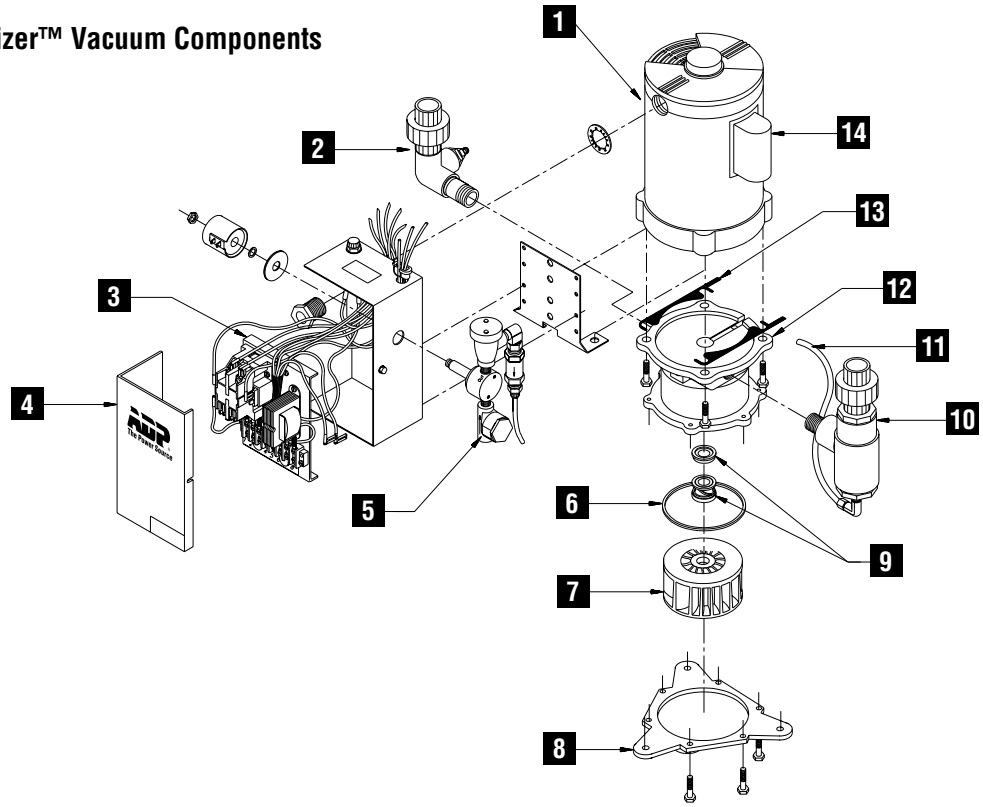
Item	Description	Quantity	Part Number
1	Filter, Air Intake	1	ACP90500
2	Elbow, JIC 1/4"	1	PCB50100
3	Assy, Comp. Head Repl.	1	ACH95460
4	Hose, Flex	1	PCH50208
5	Tray, Compressor Mount	1	AAP95100
6	Guard, Fan	1	MMS70200
7	Shroud, Fan	1	ACP70205
8	Assembly, Fan	1	SEA95245
8a	Fan	1	EMS10305
8b	Bracket, Fan	2	MBS70102
9	Kit, Gasket and Valve Plate	1	HCA30629
10	Assembly, Capacitor Relay	1	SPD95291
10a	Capacitor, Start	1	HCA30625
10b	Capacitor, Run	1	HCA30622
10c	Relay, Potential	1	HCA30655
11	Kit, Motor Mount	4	HCA30900

D. Organizer™ Compressor Components - Oil-less Models



Item	Description	Quantity	Part Number
1	Assembly, Replacement Head	1	HGH30210
2	Filter, Air Intake	2	ACP90500
3	Elbow, 45^0	2	PCB50628
4	Plug, Head Port	4	PCB50895
5	Elbow, 90^0	2	PCB50404
6	Assembly, Piston	2	HGA85415
7	Fan, Cooling	1	HGA10320
8	Shroud, Fan	1	HGA30300
9	Kit, Valve and Ring Replacement	1	HGA85325
10	Kit, Exhaust Air Crossover	1	HGA70920
11	Cylinder Head	2	HGA85107
12	Cylinder, Piston	2	HGA85102
13	Mount, Rubber Motor	4	MRP70980
14	Tray, Compressor Mount	1	AAP95100
15	Capacitor, Start	1	HGA85570
16	Capacitor, Run	1	HGA85575

E. Organizer™ Vacuum Components



Item	Description	Quantity	Classic Bronze	Gold Series	Ultra Vac
1	Replacement Pump	1	AVA95250	AVA95300	AVA95350
2	Manifold, Intake Assembly	1	AVP95850	AVP95850	AVP95850
3	Electrical Platform	1	SVA95830	SVA95830	SVA95830
3a	Fuse, 1/2 Amp	1	EMS10930	EMS10930	EMS10930
3b	Transformer 24V	1	ETR10500	ETR10500	ETR10500
3c	Relay, 24V	1	ETR10460	ETR10460	ETR10460
3d	Terminal Block	1	ECC10250	ECC10250	ECC10250
4	Cover, Electrical Box	1	ECB80561	ECB80561	ECB80561
5	Assembly, Water Solenoid	1	SVA95821	SVA95821	SVA95821
5a	Strainer, 1/4”	1	PCB50960	PCB50960	PCB50960
5b	Solenoid, 1/4” (w/Coil)	1	PVV10470	PVV10470	PVV10470
5c	Coil, Solenoid	1	ECO10102	ECO10102	ECO10102
5d	Valve, Anti-Siphon	1	PVV50595	PVV50595	PVV50595
5e	Valve, Flow Regulator .19 GPM	1	PVV50505	PVV50505	PVV50505
6	‘O’ Ring, Vacuum Base	1	MRP70955	MRP70955	MRP70955
7	Impeller, Vacuum	1	CVC80590	CVC80591	CVC80591
8	Baseplate, Vacuum	1	CVC80710	CVC80735	CVC80520
9	Seal, Vacuum Shaft	1	SVA95845	SVA95845	SVA95845
10	Recycler, Simple Solution	1	SVA95500	SVA95500	SVA95500
11	PolyFlow, Recycler	1	PCT80610	PCT80610	PCT80610
12	Housing, Vacuum Pump	1	CVC80705	CVC80730	CVC80500
13	Shim, Vacuum Pump	2	MMS71155	MMS71155	MMS71155
14	Motor, Electric Vacuum	1	HFM30905	HFM30905	HFM30905

Trouble-Shooting Chart
Organizer™ Lubricated Compressor System

DOES COMPRESSOR RUN?

YES → Does compressor run for a few seconds, "chuggs," then stops?

YES → Does compressor pressurize from 80 to 100 psi in less than 1 minute with no air being used?

YES → Does compressor cycle with no air being used?

YES → Is the moisture indicator (R) pink?

YES → Does unloader valve system function properly?

YES → Does compressor run too hot or too frequent?

YES → **1.** Locate and repair leaks **2.** Ventilate if room is above 100 deg F. **3.** Contact ADP, compressor may be undersized.

NO → Run unit in manual purge mode for one week. If indicator still wet, replace desiccant (C).

NO → **1.** Ensure that unloader valve (G), float assembly (D) & pressure switch close on pump-up, & open on purge cycle. **2.** Ensure that drain line (I) is not clogged

NO → Is there excessive oil usage?

YES → Is head (N) level?

YES → Does compressor run too hot or too frequent?

NO → Contact ADP.

NO → Level head.

NO → Is manual purge valve (Q) in "ON" position?

YES → Turn valve to "OFF" position

NO → Are there leaks in compressor or in office piping system?

YES → Locate and repair

NO → Does air leak from unloader valve (G) or pressure switch continuously until unit cycles again?

YES → Check storage check valve.

NO → Contact ADP

NOTE: Close shut off valve (A). Pump up tank to 100 psi. If pressure is maintained for 15-20 min., leak is in office lines.

NO → Does unloader valve (G) pressure switch or float assembly (D) seat while running?

YES → Is intake filter (P) clogged?

YES → Replace intake filter

NO → Is there sufficient pressure build-up with head discharge line (O) removed?

YES → Is there a blockage in the air lines?

YES → Locate and repair

NO → Defective head, contact ADP

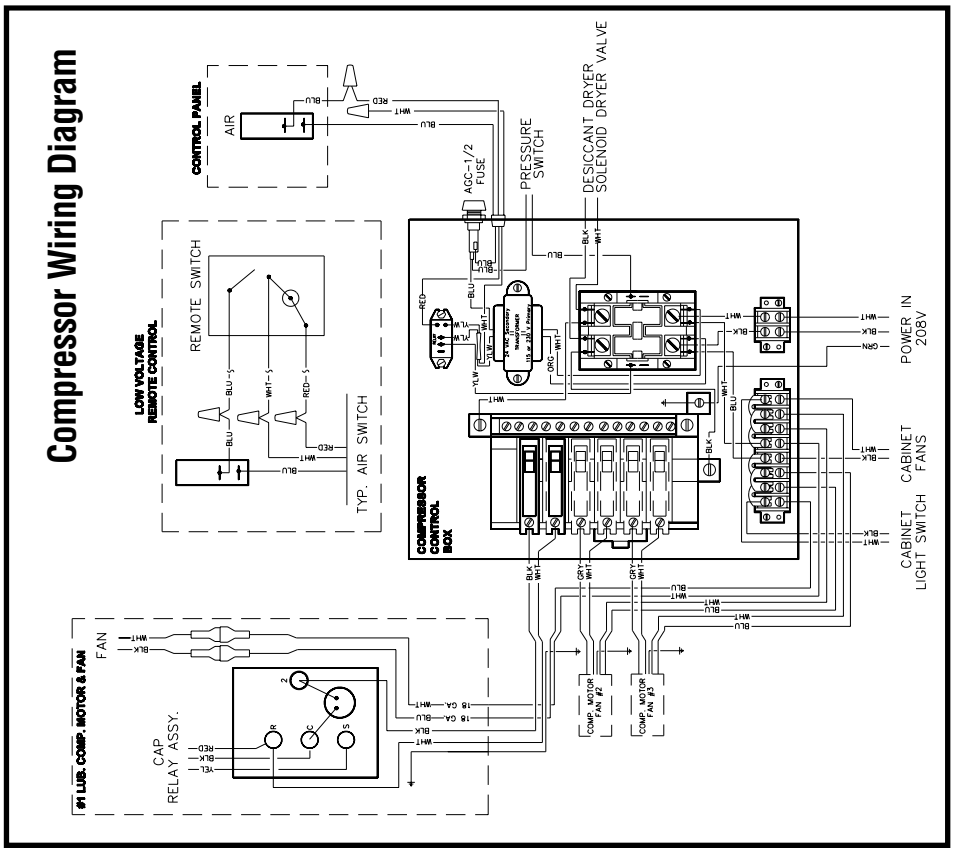
NO → Clean or replace

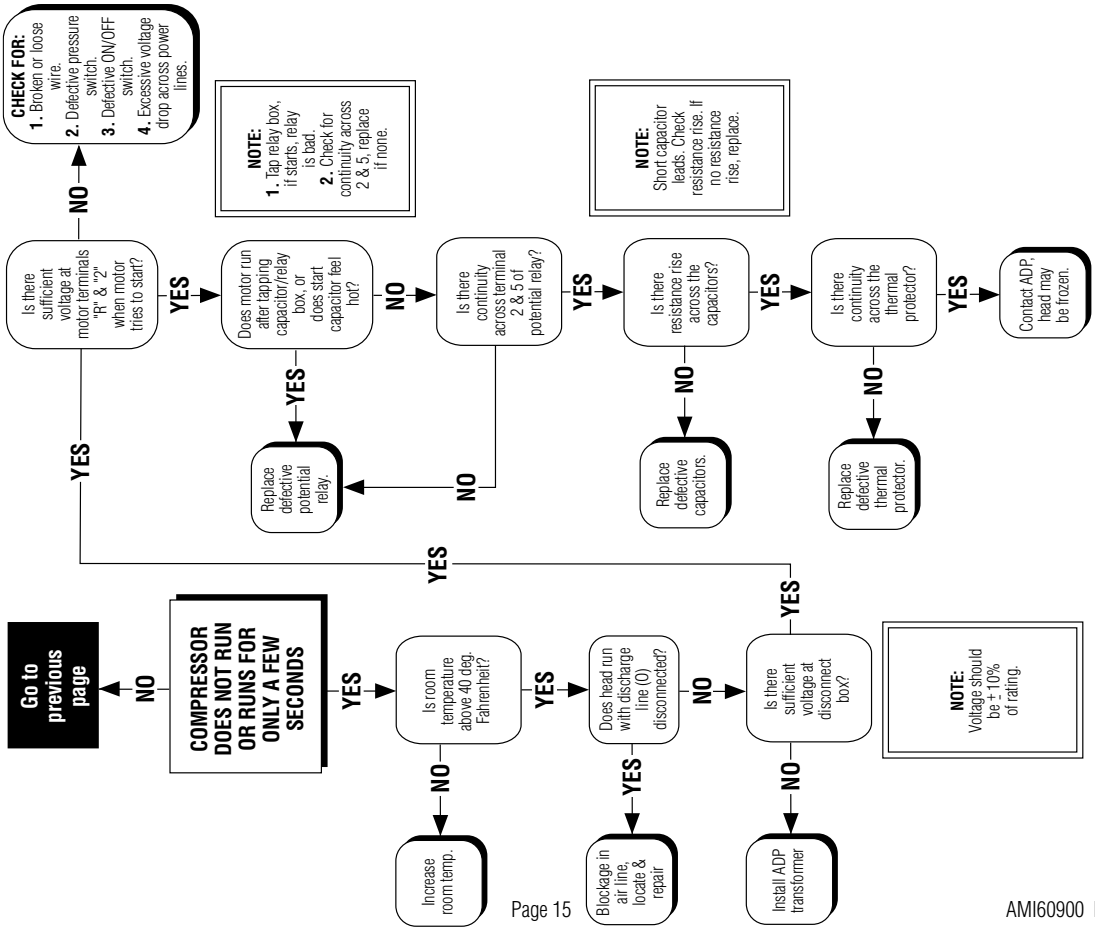
NOTE: Disconnect line from bottom of coalescing (D) bowl for proper diagnosis.

NO → **Go to next page**

Compressor Component Diagram

Trouble-Shooting Chart
Organizer™ Lubricated Compressor System




COMPRESSOR DOES NOT RUN OR RUNS FOR ONLY A FEW SECONDS
Go to previous page
NO
YES
Is room temperature above 40 deg. Fahrenheit?
Increase room temp.
Does head run with discharge line (D) disconnected?
Blockage in air line, locate & repair
Is there sufficient voltage at disconnect box?
Install ADP transformer
NOTE: Voltage should be ± 10% of rating.
Is there sufficient voltage at motor terminals "R" & "2" when motor tries to start?
CHECK FOR:
1. Broken or loose wire.
2. Defective pressure switch.
3. Defective ON/OFF switch.
4. Excessive voltage drop across power lines.
Does motor run after tapping capacitor/relay box, or does start capacitor feel hot?
NOTE:
1. Tap relay box, if starts, relay is bad.
2. Check for continuity across 2 & 5, replace if none.
Replace defective potential relay.
Is there continuity across terminal 2 & 5 of potential relay?
Is there resistance rise across the capacitors?
NOTE: Short capacitor leads. Check resistance rise. If no resistance rise, replace.
Replace defective capacitors.
Is there continuity across the thermal protector?
Replace defective thermal protector.
Contact ADP, head may be frozen.

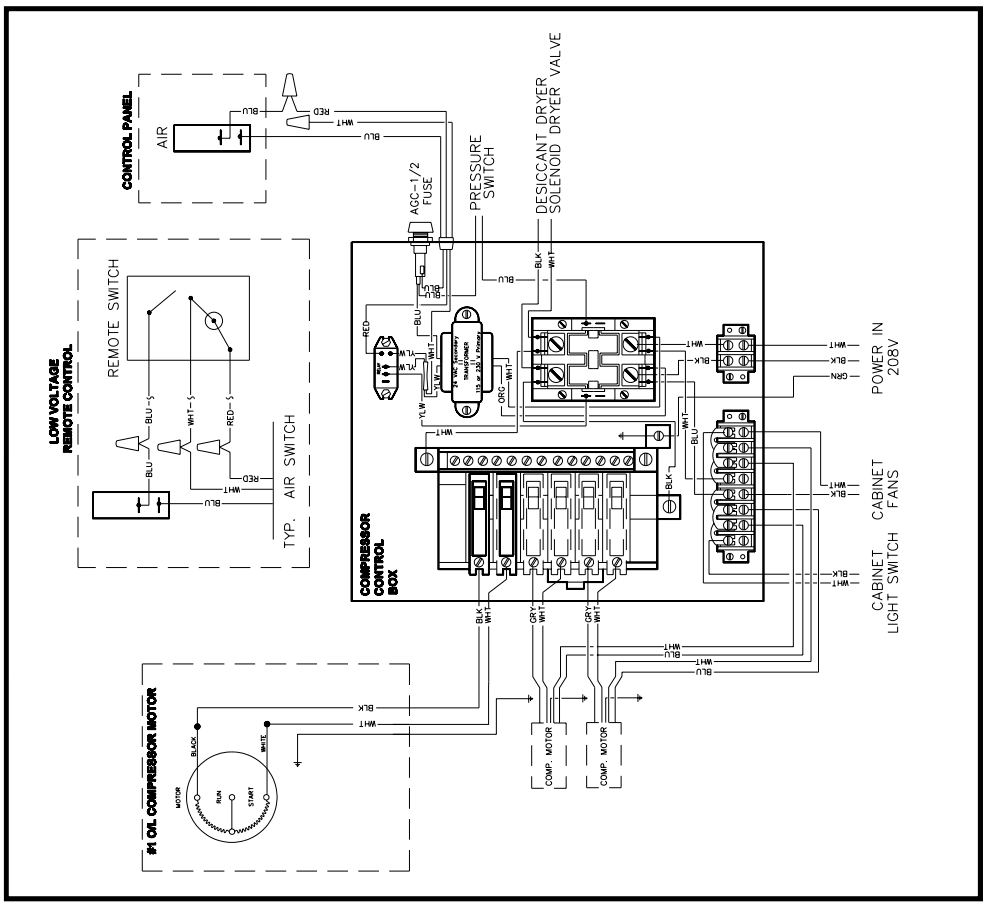
Trouble-Shooting Chart
Organizer™ Oil-Less Compressor System

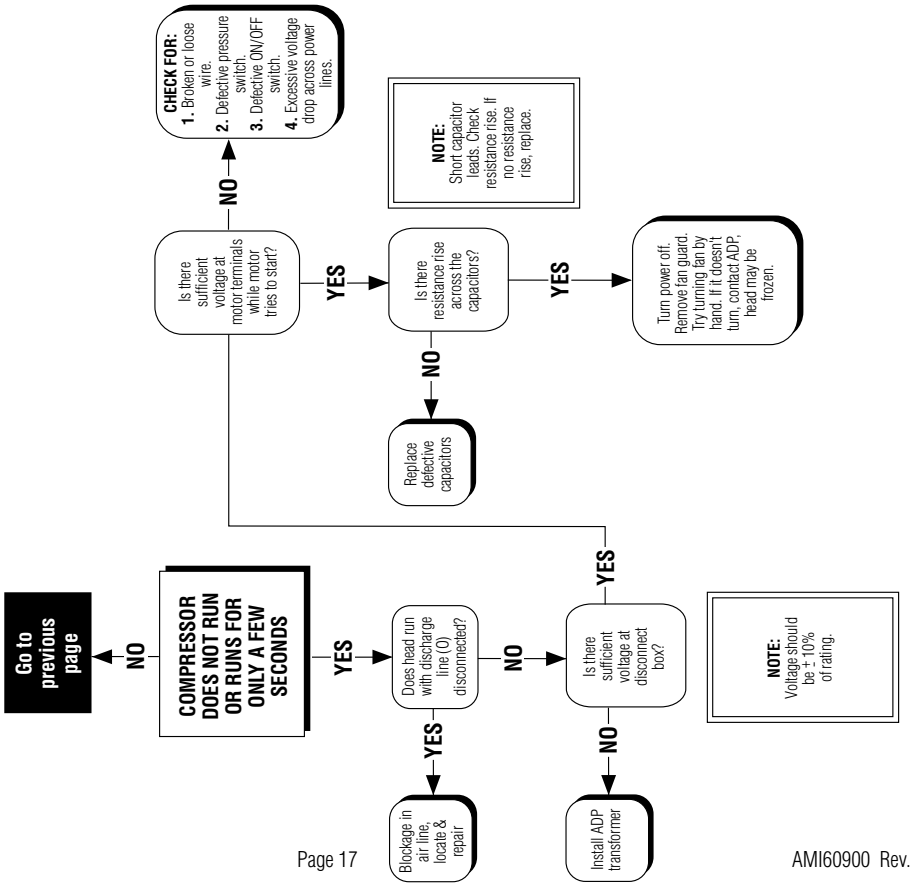
DOES COMPRESSOR RUN?
YES
NO
Go to next page
Does compressor run for a few seconds, "chuggs", then stops?
YES
NO
Does compressor pressurize from 80 to 100 psi in less than 1 minute with no air being used?
YES
NO
Does compressor cycle with no air being used?
YES
NO
Is the moisture indicator (R) pink?
YES
NO
Does unloader valve system function properly?
YES
NO
Does compressor run too hot or too frequent?
YES
NO
1. Locate and repair leaks
2. Ventilate if room is above 100 deg F.
3. Contact ADP, compressor may be undersized.
Run unit in manual purge mode for one week. If indicator still wet, replace desiccant (C).
1. Ensure that unloader valve (G), float assembly (D) & pressure switch close on pump-up, & open on purge cycle.
2. Ensure that drain line (J) is not clogged
NOTE: Close shut off valve (A). Pump up tank to 100 psi. If pressure is maintained for 15-20 min., leak is in office lines.
Is manual purge valve (Q) in "ON" position?
YES
NO
Turn valve to "OFF" position
Are there leaks in compressor or in office piping system?
YES
NO
Locate and repair
Does air leak from unloader valve (G) or pressure switch or coalescent filter float (D) continuously until unit cycles again?
YES
NO
Check storage check valve.
Contact ADP
NOTE: Disconnect line from bottom of coalescing (D) bowl for proper diagnosis.
Does unloader valve (G) pressure switch or float assembly (D) seat while running?
YES
NO
Clean or replace
Is intake filter (P) clogged?
YES
NO
Replace intake filter
Is there sufficient pressure build-up with head discharge line (M) removed?
YES
NO
Defective head, contact ADP
Is there a blockage in the air lines?
YES
NO
Locate and repair

Compressor Component Diagram

NOTE: Lubricated Model Shown

Trouble-Shooting Chart
Organizer™ Oil-Less Compressor System

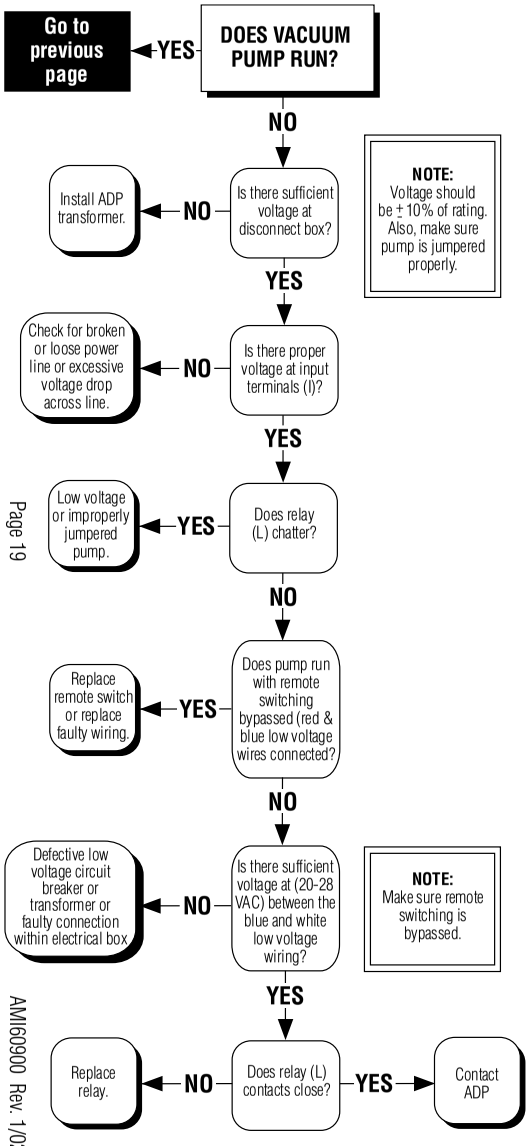


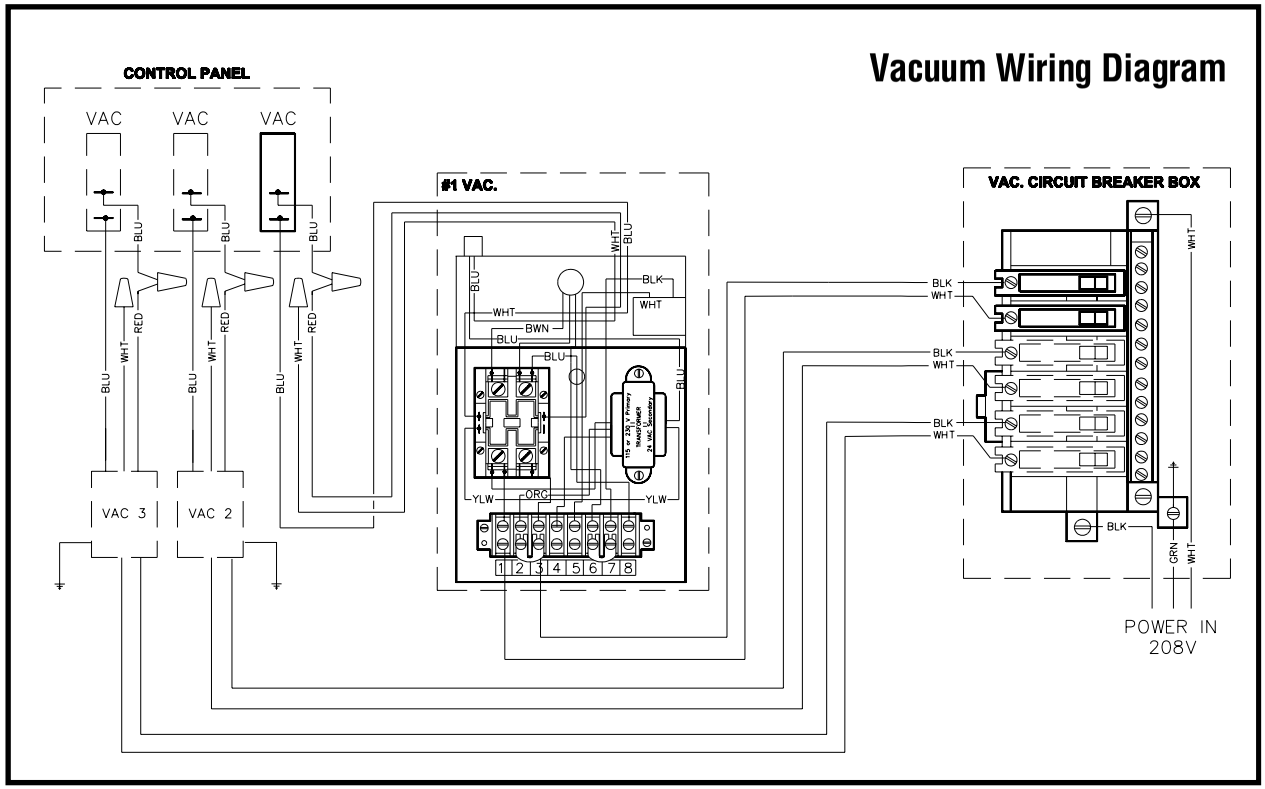

COMPRESSOR DOES NOT RUN OR RUNS FOR ONLY A FEW SECONDS
NO
Go to previous page
YES
Does head run with discharge line (O) disconnected?
NO
Is there sufficient voltage at disconnect box?
YES
NO
Install ADP transformer
YES
Blockage in air line, locate & repair
NOTE: Voltage should be ± 10% of rating.
Is there sufficient voltage at motor terminals while motor tries to start?
NO
CHECK FOR:
1. Broken or loose wire.
2. Defective pressure switch.
3. Defective ON/OFF switch.
4. Excessive voltage drop across power lines.
YES
Is there resistance rise across the capacitors?
NOTE: Short capacitor leads. Check resistance rise. If no resistance rise, replace.
NO
Replace defective capacitors
YES
Turn power off. Remove fan guard. Try turning fan by hand. If it doesn't turn, contact ADP. head may be frozen.

Trouble-Shooting Chart
Organizer™ Vacuum System

DOES VACUUM PUMP RUN?
NO
Go to next page
YES
Clean or replace filter.
Is intake strainer screen (J) clogged or is swing check valve (H) sticking?
NO
YES
Repair leaks.
Are there any vacuum leaks at the pump?
NO
YES
Remove vacuum inlet line from pump. If there is good suction at pump, but little or none in system, the system is clogged or contains leaks.
Is the office vacuum piping system faulty?
NO
YES
Adjust to 10" hg.
Is the vacuum relief valve (K) set too low (normal level is 10" hg)?
NO
YES
CHECK FOR:
"Open" water supply valve.
Clogged recycling line.
Clogged water strainer (M).
Clogged water regulator (M).
Check for proper voltage at water solenoid coil (M) (115 VAC on 1 & 1-1/2 hp, 230 VAC on 2 & 3 hp). Replace coil if proper voltage exists.
Is there adequete water supply or water pressure?
NO
YES
Check usage chart for maximum number of simultaneous users. Upgrade if necessary.
Is there excessive vacuum?
NO
YES
Clean or replace filter.
Is vacuum relief filter (K) clogged?
NO
YES
CHECK FOR:
1. Proper sealing of strainer bowl (J). O-ring may be pinched.
2. Proper fuctioning vacuum relief valve (K). Valve may be sticking open.
Adjust to 10" hg.
Is vacuum relief valve (K) set too high (above 10" hg)?
NO
YES
Contact ADP
Is there sufficient suction?
NO
YES
Check for adequete ventilation.
Does thermal protector shut the pump down?
NO
YES
1. Check for incorrectly sized or defective breaker.
2. Check for proper wire gauge size.
Is circuit breaker tripping?
NO
YES
Replace relay.
Does relay (L) contacts remain closed?
NO
YES
Contact ADP.
Does pump run intermittently?
YES

Trouble-Shooting Chart
Organizer™ Vacuum System


Go to previous page
YES
DOES VACUUM PUMP RUN?
NO
Is there sufficient voltage at disconnect box?
NO
Install ADP transformer.
NOTE: Voltage should be ± 10% of rating. Also, make sure pump is jumpered properly.
YES
Is there proper voltage at input terminals (l)?
NO
Check for broken or loose power line or excessive voltage drop across line.
YES
Does relay (L) chatter?
YES
Low voltage or improperly jumpered pump.
NO
Does pump run with remote switching bypassed (red & blue low voltage wires connected?
YES
Replace remote switch or replace faulty wiring.
NO
Is there sufficient voltage at (20-28 VAC) between the blue and white low voltage wiring?
NO
Defective low voltage circuit breaker or transformer or faulty connection within electrical box
NOTE: Make sure remote switching is bypassed.
YES
Does relay (L) contacts close?
NO
Replace relay.
YES
Contact ADP



AMI60900 Rev. 1/02

Apollo Dental Products by MIDMARK®

Installation & Operation
Organizer™ Systems
Technical Service - (800) 233-4151

Warranty Information:

- **2 Years - All Electrical Components**
- **2 Years - Lubricated Compressor Heads**
- **3 Years - Oil-Less Compressor Heads**
- **2 Years - Classic Bronze™ Vacuum Pump Components**
- **3 Years - Gold Series™ Vacuum Pump Components**
- **5 Years - UltraVac™ Vacuum Pump Components**

All ADP units are thoroughly inspected and tested in accordance with rigid specifications and standards. Our products are guaranteed against any defective material and workmanship from the date of shipment; provided, that the installation, operation, and maintenance is done in accordance with ADP procedures as outlined in our Installation and Maintenance Guides. Warranty cards must be returned to ADP within ten days of installation to effect warranty. No other warranties or guarantees, expressed or implied are made.

ADP's obligation under the warranty is to provide parts for the repair or, at its option, to provide the replacement product (excluding labor). All special, incidental and/or consequential damages are excluded. We will not issue credit for complete air compressors or vacuum systems without first attempting to correct the problem in the field. Written notice of breach of warranty must be given to ADP within the warranty period. The warranty does not cove damage resulting form improper installation or maintenance, accident or misuse. The warranty does not cover damage resulting from the use of cleaning, disinfecting or sterilizing chemicals and processes. The warranty does not cover vacuum failures due to hard water deposits. Failure to follow instructions provided in ADP's Installation and Maintenance Guides may void the warranty.